



Material Safety Data Sheet

OSHA / ANSI Z400.1-2004 Compliant

MSDS date: 22-Sep-2005

NFPA Rating: Health: 1 Flammability: 1 Instability: 0
HMIS Rating: Health: 1 Flammability: 1 Physical Hazard: 0 Personal Protection: B

1. PRODUCT AND COMPANY IDENTIFICATION

Product Name: ZETAG 7645
Product Number: 9027237
Chemical Family: Copolymer of a quaternary acrylate salt and acrylamide.
Intended Use: Flocculant
Manufacturer/Supplier: Ciba Specialty Chemicals Corporation
2301 Wilroy Road
Suffolk, VA 23434
8:30am - 5pm Phone Number: 1-757-538-3700
MSDS Request Line (voicemail): 1-800-431-2360
Customer Service/Product Information 1-800-322-3885
Emergency 24-Hour Health/Environmental Phone: 1-800-873-1138

2. HAZARDS IDENTIFICATION

EMERGENCY OVERVIEW

Signal Word: WARNING!
Physical Form: Powder
Color: White to off-white
Odor: Odorless
Health: May cause some eye irritation which should cease on removal of the product. May cause slight skin irritation with repeated or prolonged exposure.. Inhalation of dust may cause respiratory tract irritation..
Physical Hazards: Slip hazard when wet, Organic powders may be capable of generating static discharges and creating explosive mixtures in air. Handle with caution.
Environmental: Prevent spillage or leakage to a body of water.

OSHA Hazardous Substance: This material is classified as hazardous under OSHA regulations.

Primary Route(s) of Entry: Inhalation, Eyes, Skin.

3. COMPOSITION/INFORMATION ON INGREDIENTS

HAZARDOUS COMPONENTS

Components	CAS Number	Weight %
Ethanaminium, N,N,N-trimethyl-2-[(1-oxo-2-propenyl)oxy]-, chloride, polymer with 2-propenamide	69418-26-4	86-90
Hexanedioic acid	124-04-9	3-5

4. FIRST AID MEASURES

Eyes: Flush the eye(s) with lukewarm, gently flowing water for 5-10 minutes or until the chemical is removed. Get medical attention if irritation persists.

Skin: If clothing is contaminated, remove and launder before reuse. Wash off immediately with soap and plenty of water. Get medical attention if irritation occurs.

Inhalation: Remove to fresh air, if not breathing give artificial respiration. If breathing is difficult, give oxygen and get immediate medical attention.

Ingestion: Do not induce vomiting. If vomiting occurs naturally, have casualty lean forward to reduce the risk of aspiration. Seek medical attention immediately.

5. FIRE FIGHTING MEASURES

Fire Fighting Measures: Standard procedure for chemical fires.

Suitable Extinguishing Media: Carbon dioxide, dry chemical or foam.

Unsuitable Extinguishing Media: The product becomes slippery when wet. If water is used, restrict pedestrian and vehicular traffic in areas where slip hazard may exist.

Fire Fighting Equipment: Wear self-contained breathing apparatus and protective suit.

Unusual hazards: Dust in sufficient concentration can result in an explosive mixture in air. Handle to minimize dusting and eliminate open flame and other sources of ignition.

Hazardous Combustion Products: Burning may produce oxides of carbon or nitrogen.

6. ACCIDENTAL RELEASE MEASURES

Cleanup Instructions: Product becomes slippery and difficult to handle when wet. Sweep up and shovel into suitable containers for disposal. Avoid dust formation. Wear suitable protective equipment. Should not be released into the environment.

7. HANDLING AND STORAGE

Handling: As with all industrial chemicals, use good industrial practices when handling. Avoid eye, skin, and clothing contact. Do not inhale. Do not taste or swallow. Use only with adequate ventilation. Slip hazard when wet. Clean up spills promptly.

Storage: Store in a cool, dry, well-ventilated place. Avoid wet, damp or humid conditions, temperature extremes and ignition sources.

Explosion Hazards:

- Combustible powder.
- Avoid creating dusty conditions.
- Grounding is required when emptying into a conductive container.
- When flammable solvents are present, the container must be inerted or the system otherwise designed to prevent or contain an explosion. Seek expert advice.

In addition, for products packaged in fused-lined (coated) fiber drums, fiber drums with conductive liners, steel drums, steel pails, and Type "C" FIBC (bulk bags), or other conductive the following instructions also apply:

- Always ground this package before emptying.

The user is responsible for designing the system to handle solid and ensuring proper training of employees in the system's use.

For Industrial Use Only**8. EXPOSURE CONTROLS / PERSONAL PROTECTION****Exposure Guidelines:**

Components	OSHA PEL	OSHA STEL	ACGIH TWA	ACGIH STEL	Ciba/ Manufacturer IEL:
Hexanedioic acid 124-04-9			5 mg/m ³		

Personal Protective Equipment

- Eye/Face Protection:** Wear safety glasses or goggles to protect against dust particles.
- Skin Protection:** Wear chemical resistant gloves and protective clothing.
- Respiratory Protection:** Use NIOSH approved respirator as needed to mitigate exposure.
- Engineering Controls:** Work in well ventilated areas. Do not breathe dust. Local exhaust/ventilation recommended.
- Other Protective Equipment:** Eye wash station and safety shower should be available in immediate work area. Select additional protective equipment based upon potential for exposure.

9. PHYSICAL AND CHEMICAL PROPERTIES

Physical Form:	Powder
Color:	White to off-white
Odor:	Odorless.
Freezing/Melting Point:	Not determined
Solubility in water:	Soluble, solubility limited by viscosity
Vapor Density:	Not applicable
Vapor Pressure:	Not applicable
Density:	0.75 g/cm ³
Specific Gravity:	Not applicable
pH:	Not determined
Percent Volatile:	Not determined

VOC:	Not determined
Partition Coefficient (Octanol/Water):	Not determined
Decomposition Temperature:	Not determined
Flammability Limits in Air:	
Flash point:	Not applicable
Test Method (for Flash Point):	Not applicable

10. STABILITY AND REACTIVITY

Stability:	Stable.
Conditions to Avoid:	Avoid wet or humid conditions. Avoid high temperatures. Avoid handling conditions that create dust. Avoid static discharges and sources of ignition.
Incompatibility:	Strong oxidizing agents. (may degrade polymer)
Hazardous Decomposition Products:	No decomposition expected under normal storage conditions.
Possibility of Hazardous Reactions:	Product has a high minimum ignition energy; however, dust may be ignited under some conditions.

11. TOXICOLOGICAL INFORMATION

Acute Oral Toxicity:	Not determined.
Acute Dermal Toxicity:	Not determined
Acute Inhalation Toxicity:	Not determined.
Eye Irritation:	Product has not been tested. Component(s) in greater than 1 percent concentration is known to be an irritant.
Skin Irritation:	Not determined.
Skin Sensitization:	Not determined
Carcinogenicity (IARC; NTP; OSHA; ACGIH):	None of the components in this product at concentrations greater than 0.1% are listed by IARC; NTP, OSHA or ACGIH as a carcinogen.
Carcinogenicity Studies:	Not listed as a carcinogen by IARC, NTP, OSHA, or ACGIH.
Mutagenicity:	Not determined
Reproductive Toxicity:	Not determined
Teratogenicity:	Not determined.
Neurotoxicity:	Not determined
Subacute Toxicity:	Not determined
Subchronic Toxicity:	Not determined
Chronic toxicity:	Not determined

**Absorption / Distribution /
Excretion / Metabolism:** Not determined

Additional Information: Not determined

12. ECOLOGICAL INFORMATION

Toxicity to Fish: LC50 > 100 mg/L 96 hour (Menidia beryllina) (under static conditions)
NOEC = 100 mg/l
LC50: 447 mg/L 96-hour, (Rainbow trout) (under static conditions in the presence of 20 mg/L humic acid)
NOEC, 96-hour, 200 mg/L

Toxicity to Invertebrates: LC50: 96 hour >100 mg/L Mysids (Mysidopsis bahia) (under static conditions)
NOEC 100 mg/L
EC50: >50 mg/L 48 hour (Daphnia) (under static conditions in the presence of 20 mg/L humic acid)
NOEC: 13 mg/L

Toxicity to Algae: Not determined

Toxicity to Sewage Bacteria: Not determined

**Activated Sludge Respiration
Inhibition Test:** Not determined

**Biochemical Oxygen Demand
(BOD):** Not determined

Chemical Oxygen Demand (COD): Not determined

Total Oxygen Demand (TOD): Not determined

Biodegradability: Not determined

Bioaccumulation: Not determined

Additional Environmental Data: Not determined

13. DISPOSAL CONSIDERATIONS

Waste Disposal: Dispose in accordance with local, state, provincial and federal regulations.

14. TRANSPORT INFORMATION

U.S. Department of Transportation (DOT):

Not regulated for this mode of transport.

International Maritime Dangerous Goods (IMDG):

Not regulated for this mode of transport.

International Air Transportation Authority (IATA):

Not regulated for this mode of transport.

15. REGULATORY INFORMATION**Federal Regulations****OSHA Hazardous Substance:** This material is classified as hazardous under OSHA regulations**Clean Air Act - Hazardous Air Pollutants (HAP):** This product contains the following Hazardous Air Pollutants (HAP), as defined by the U.S. Clean Air Act Section 112 (40 CFR 61).

Components	CAA Section 112 Statutory Hazardous Air Pollutants
2-propenamide 79-06-1 (0-0.1 %)	Listed.

Clean Air Act - Volatile Organic Compounds (VOC): This product contains the following SOCMI Intermediate or Final Volatile Organic Compounds (VOC), as defined by the U.S. Clean Air Act Section 111 (40 CFR 60.489).

Components	CAA Section 111 Volatile Organic Compounds
Hexanedioic acid 124-04-9	Listed.
Urea 57-13-6	Listed.
2-propenamide 79-06-1	Listed.

Clean Air Act - Ozone Depleting Substances (ODS): This product neither contains, nor was manufactured with, a Class I or Class II ozone depleting substance (ODS), as defined by the U.S. Clean Air Act Section 602 (40 CFR 82, Subpt. A, App. A+B).**Clean Water Act - Priority Pollutants (PP):** This product does not contain any priority pollutants listed under the U.S. Clean Water Act Section 307 (2)(1) Priority Pollutant List (40 CFR 401.15).**Resource Conservation and Recovery Act (RCRA):** Not a hazardous waste under RCRA (40 CFR 261.21).**SARA Section 302 Extremely Hazardous Substances (EHS):** This product contains the following component(s) regulated under Section 302 (40 CFR 355) as Extremely Hazardous Substances.

Components	Section 302 Extremely Hazardous Substances (EHS)
2-propenamide 79-06-1 (0-0.1 %)	Listed.

SARA Section 304 CERCLA Hazardous Substances: This product contains the following component(s) regulated under Section 304 (40 CFR 302) as hazardous chemicals for emergency release notification ("CERCLA" List).

Components	Section 304 CERCLA Hazardous Substances	CERCLA Reportable Quantity
Hexanedioic acid 124-04-9 (3-5 %)	Listed.	5000 LBS
2-propenamide 79-06-1 (0-0.1 %)	Listed.	5000 LBS

SARA Section 311/312 Hazard Communication Standard (HCS): This product is regulated under Section 311/312 HCS (40 CFR 370). Its hazard(s): Acute (immediate) health hazard.

SARA Section 313 Toxic Chemical List (TCL): This product does not contain any component(s) listed on the Section 313 Toxic Chemical List.

TSCA Section 8(b) Inventory Status: All component(s) comprising this product are either exempt or listed on the TSCA inventory.

TSCA Section 5(e) Consent Orders: This product is not subject to a Section 5(e) Consent Order.

TSCA Significant New Use Rule (SNUR): This product is not subject to a Significant New Use Rule (SNUR).

TSCA Section 5(f): This product is not subject to a Section 5(f)/6(a) rule.

TSCA Section 12(b) Export Notification: This product does not contain any component(s) that are subject to a Section 12(b) Export Notification

State Regulations

California Proposition 65: This product contains the following component(s) currently on the California list of Known Carcinogens and Reproductive Toxins.

Components	California Proposition 65
2-propenamide 79-06-1	Carcinogenic.

Pennsylvania Right-To-Know: This product contains the following component(s) which are subject to Pennsylvania Right-to-Know disclosure requirement.

Components	CAS Number	Pennsylvania Right-to-Know
2-propenamide	79-06-1	Listed. Environmental hazard.
Water	7732-18-5	Not Listed.
Ethanaminium, N,N,N-trimethyl-2-[(1-oxo-2-propenyl)oxy]-, chloride, polymer with 2-propenamide	69418-26-4	Not Listed.
Hexanedioic acid	124-04-9	Listed. Environmental hazard.

International Regulations

Chemical Weapons Convention (CWC): This product does not contain any component(s) listed under the Chemical Weapons Convention Schedule of Chemicals.

Domestic Substance List (DSL) Status: All components either exempt or listed on the DSL.

16. OTHER INFORMATION

Reason for revision: Toxicological update.

Product Safety & Regulatory (PS&R) contact: Karin Baron (757) 538-5126

Disclaimer: The information contained herein is based upon data believed to be correct. However, no guarantee or warranty of any kind, expressed or implied, is made with respect to such data or information. The user is responsible for determining whether the product is suitable for its intended conditions of use.